

**REMARKS**

This Amendment, submitted in response to the Office Action dated June 17, 2004, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

As a preliminary matter, Applicant requests the Examiner to acknowledge receipt of all priority papers in the application. Applicant previously submitted the priority document on October 10, 2001 as evidenced by the PTO date-stamped serial number card and PAIR listing (ATTACHMENT A). While the Examiner has acknowledged claim to priority, the Examiner has not yet acknowledged receipt of the supporting priority papers. Applicant requests acknowledgment to complete the record on this matter.

Turning to the merits of the Office Action, claims 1-15 remain pending in the application. Claims 1 and 4-5 have been rejected under 35 U.S.C. § 102 as being anticipated by Chikuma et al. (U.S.P. 5,172,369). Claims 2-3, 6-7 and 11-15 have been rejected under 35 U.S.C. § 103 as being unpatentable over Chikuma in view of Tamada (U.S.P. 6,515,956). Claims 8-10 have been rejected under 35 U.S.C. § 103 as being unpatentable over Chikuma in view of Murakami (U.S.P. 6,381,356).<sup>1</sup> Applicant submits the following comments in traversal of the prior art rejections.

To expedite prosecution of this case, Applicant has amended independent claim 1 to include the features of pending claim 2 and traverses the prior art rejections as follows.

Applicant's invention relates to a wavelength conversion element, which may be used in a recording apparatus. Conventional apparatus are known to reflect a fundamental wavelength (wavelength prior to conversion) back towards a laser light source. The reflected light includes irregularities which provides a degraded laser output. Applicant's invention overcomes these deficiencies by providing a removing device to remove the fundamental wave at a position on an exit end of the converting element. In an exemplary embodiment, the removing unit comprises an IR cutting filter.

Turning to the cited art, Chikuma relates to a reading/recording apparatus for an optical disk. In the description of the background art, Chikuma describes a recording apparatus whereby a primary ray undergoes wavelength conversion through second harmonic generation (SHG). At the output end of the SHG device, a primary ray filter interrupts passage of the primary ray. The invention of Chikuma indicates that this known arrangement has the deficiency of not enabling playback of data recorded using the primary ray. Col. 1, line 67-col. 2, line 4. In that connection, the purported inventive apparatus of Chikuma records a medium by passing both the primary and converted light to the recording target. Col. 2, lines 37-46. This provides recording data at two wavelengths, thereby allowing information to be recorded at high density without the limitations of available NA lenses to converge a recording light to a small diameter. Relatedly, a portion of the primary ray reflected from the recording surface of disk 9 becomes reflected by beam splitter 6 towards a detector 12 for focus and tracking error detection.

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<sup>1</sup> Though paragraph 5 of the detailed action identifies Murakami as "Murakami ('312)," Applicant's undersigned representative has confirmed with the Examiner that the correct rejection should reference U.S.P. 6,381,356 as identified above.

Tamada also relates generally to an optical disk system, with no disclosed wavelength converter. Similar to Chikuma, a portion of the system light reflected back from the medium is used for error detection.

Murakami relates to a light for detection of defects in a test piece.

The Examiner contends that the combination of Chikuma and Tamada teaches each feature of claim 2, which features are now included in independent claim 1. The Examiner concedes that Chikuma does not disclose a removing portion as an IR cutting filter but cites Tamada to make up the deficiency. The Examiner contends that it would be obvious to include the IR filter in the device of Chikuma for purposes of monitoring the laser light output. The proposed rationale to include the cut off filter to monitor the relevant wavelength appears to be internally inconsistent. A cut off filter would effectively extinguish the presence of the light component that the Examiner contends would be useful for monitoring purposes. Thus, the Examiner's preferred reason for making the modification is incorrect.

Relatedly, the use of an IR cut off filter would fundamentally contradict a principle of operation of the Chikuma reference. In Chikuma, a primary wavelength of the source light becomes passed for purposes of recording using the source light. Cutting off the source light would eliminate one of the principle objects of the primary reference. Such a modification will not support a prior art rejection.

Furthermore, the monitoring of a recording light contemplated by Tamada comprises reflection of the laser light back from the recording medium. Col. 16, lines 4-6. Therefore, the

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laser light, such as the IR source is not cut off, but rather must be passed in the Tamada reference.

For all the above reasons, independent claim 1 is patentable over Chikuma and Tamada. The remaining claims are patentable based on their dependency.

With further regard to the rejection of claims 8-10 over Chikuma and Murakami, Murakami does not make up for the above deficiencies.

Applicant has added claims 16-17 to describe features of the invention more particularly.

In view of the above, Applicant submits that claims 1 and 3-17 are in condition for allowance. Therefore it is respectfully requested that the subject application be passed to issue at the earliest possible time. The Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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**23373**

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Light wavelength converting module

Application Data	Transaction History	Image File Wrapper	Foreign Priority	Published Documents	Publication Dates
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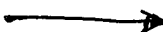
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